

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:

**Flint Hills Resources
23425 Amoco Rd
Channahon, IL 60410**

ATTENTION:

Environmental Manager

Request to Provide Information Pursuant to the Clean Air Act

The U.S. Environmental Protection Agency is requiring Flint Hills Resources (Flint Hills or you) to submit certain information about the facility at 23425 Amoco Rd, Channahon, Illinois. Appendix A provides the instructions needed to answer this information request, including instructions for electronic submissions. Appendix B specifies the information that you must submit. You must send this information to us within 30 calendar days after you receive this request.

We are issuing this information request under Section 114(a) of the Clean Air Act (the CAA), 42 U.S.C. § 7414(a). Section 114(a) authorizes the Administrator of EPA to require the submission of information. The Administrator has delegated this authority to the Director of the Air and Radiation Division, Region 5.

Flint Hills owns and operates an emission source at the Channahon, Illinois facility. We are requesting this information to determine whether your emission source is complying with the Clean Air Act and Illinois State Implementation Plan.

Flint Hills must send all required information to:

Attn: Compliance Tracker, AE-18J
Air Enforcement and Compliance Assurance Branch
U.S. Environmental Protection Agency
Region 5
77 W. Jackson Boulevard
Chicago, Illinois 60604

Flint Hills must submit all required information under an authorized signature with the following certification:

I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to Section 113(c)(2) of the Clean Air Act and 18 U.S.C. §§ 1001 and 1341.

As explained more fully in Appendix C, you may assert a claim of business confidentiality under 40 C.F.R. Part 2, Subpart B for any part of the information you submit to us. Information subject to a business confidentiality claim is available to the public only to the extent, and by means of the procedures, set forth at 40 C.F.R. Part 2, Subpart B. If you do not assert a business confidentiality claim when you submit the information, EPA may make this information available to the public without further notice. You should be aware, moreover, that pursuant to Section 114(c) of the CAA and 40 C.F.R. § 2.301(a) and (f), emissions data, standards and limitations are not entitled to confidential treatment and shall be made available to the public notwithstanding any assertion of a business confidentiality claim. Appendix C provides additional information regarding the meaning and scope of the term “emissions data.”


This information request is not subject to the Paperwork Reduction Act, 44 U.S.C. § 3501 *et seq.*, because it seeks collection of information from specific individuals or entities as part of an administrative action or investigation.

We may use any information submitted in response to this request in an administrative, civil or criminal action.

Failure to comply fully with this information request may subject Flint Hills to an enforcement action under Section 113 of the CAA, 42 U.S.C. § 7413.

You should direct any questions about this information request to Muhammed Shuaibi at (312) 353-2075 or shuaibi.muhammed@epa.gov.

6/21/17
Date



Edward Nam
Director
Air and Radiation Division

Appendix A

When providing the information requested in Appendix B, use the following instructions and definitions.

Instructions

1. Provide a separate narrative response to each question and subpart of a question set forth in Appendix B.
2. Precede each answer with the number of the question to which it corresponds and, at the end of each answer, identify the person(s) who provided information used or considered in responding to that question, as well as each person consulted in the preparation of that response.
3. Indicate on each document produced, or in some other reasonable manner, the number of the question to which it corresponds.
4. When a response is provided in the form of a number, specify the units of measure of the number in a precise manner.
5. Where information or documents necessary for a response are neither in your possession nor available to you, indicate in your response why the information or documents are not available or in your possession, and identify any source that either possesses or is likely to possess the documents or information.
6. If information not known or not available to you as of the date of submission later becomes known or available to you, you must supplement your response. Moreover, should you find at any time after the submission of your response that any portion of the submitted information is false or incorrect, you must notify EPA as soon as possible.

Electronic Submissions

To aid in our electronic recordkeeping efforts, we request that you provide all documents responsive to this information request in an electronic format according to paragraphs 1 through 6, below. These submissions are in lieu of hard copy.

1. Provide all responsive documents in Portable Document Format (PDF) or similar format, unless otherwise requested in specific questions. If the PDFs are scanned images, perform at least Optical Character Recognition (OCR) for "image over text" to allow the document to be searchable. Submitters providing secured PDFs should also provide unsecured versions for EPA use in repurposing text.
2. When specific questions request data in electronic spreadsheet form, provide the data and corresponding information in editable Excel or Lotus format, and not in image format. If Excel or Lotus formats are not available, then the format should allow for data to be used in calculations by a standard spreadsheet program such as Excel or Lotus.

3. Provide submission on physical media such as compact disk, flash drive or other similar item.
4. Provide a table of contents for each compact disk or flash drive containing electronic documents submitted in response to our request so that each document can be accurately identified in relation to your response to a specific question. *We recommend the use of electronic file folders organized by question number.* In addition, each compact disk or flash drive should be labeled appropriately (e.g., Company Name, Disk 1 of 4 for Information Request Response, Date of Response).
5. Documents claimed as confidential business information (CBI) must be submitted on separate disks/drives apart from the non-confidential information. This will facilitate appropriate records management and appropriate handling and protection of the CBI. Please follow the instructions in Appendix C for designating information as CBI.
6. Certify that the attached files have been scanned for viruses and indicate what program was used.

Definitions

All terms used in this information request have their ordinary meaning unless such terms are defined in the CAA, 42 U.S.C. §§ 7401 *et seq.*

1. The terms “document” and “documents” shall mean any object that records, stores, or presents information, and includes writings, memoranda, records, or information of any kind, formal or informal, whether wholly or partially handwritten or typed, whether in computer format, memory, or storage device, or in hardcopy, including any form or format of these. If in computer format or memory, each such document shall be provided in translation to a form useable and readable by EPA, with all necessary documentation and support. All documents in hard copy should also include attachments to or enclosures with any documents.
2. The term “total resource effectiveness (TRE) index value” shall mean a measure of the supplemental total resource requirement per unit reduction of organic HAP associated with a process vent stream, based on vent stream flow rate, emission rate of organic HAP, net heating value, and corrosion properties (whether or not the vent stream contains halogenated compounds), as quantified by the equations given under 40 C.F.R § 63.115.

Appendix B

Information You Are Required to Submit to EPA

Flint Hills Resources must submit the following information pursuant to Section 114(a) of the CAA, 42 U.S.C. § 7414(a) regarding the facility at 23425 Amoco Rd, Channahon, Illinois (Facility).

General:

1. Provide a copy of all air permit applications submitted to the Illinois Environmental Protection Agency (IEPA) for the Facility since April 2007.
2. Provide a copy of all air permits issued by IEPA for the Facility since the Facility's Title V permit was issued on April 28, 2000.
3. Provide copies of all annual emissions reports submitted to IEPA for the Facility from 2012 to the present, and include:
 - a. A narrative describing the method used for the annual emissions calculations for each pollutant, including the basis of any emissions factors used; and
 - b. Any documents outlining procedures for calculating annual emissions.
4. Provide a list of all emissions tests conducted at the Facility for any reason, from April 2007 to the present, and provide copies of all emissions test reports. Emission testing includes, but is not limited to, compliance testing, engineering testing, and testing for general information. Use the following guidelines for compiling the list and preparing copies of the emission test reports:
 - a. **List:** Identify the emissions unit, the date of the test, the federal or state regulation requiring the test (if applicable), the test method(s) used, the physical location of the sample collection points (e.g., before or after emission unit or air pollution control device), and the production rate of the associated emission unit. For each test during which the emission unit was not operating at maximum design capacity, provide an explanation for why production was limited. Indicate whether the test report was shared with IEPA.
 - b. **Copies:** Provide full emission test reports, including the summary pages, the section describing the process parameters and production or processing rates at the time of the test, all test runs, and all calculations.
5. Provide a list of affected sources the Facility has identified as subject to the National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (Miscellaneous Organic NESHAP or MON), at 40 CFR Part 63, Subpart FFFF. For each affected unit, list the applicable MON requirements.
6. Provide an electronic spreadsheet with average monthly volatile organic material (VOM) emissions from the Cooling Towers and groundwater Decanter System for each month

and year from April 2012 to present. Provide an explanation of how the numbers were calculated.

Maleic Anhydride Unit (MAN):

7. Identify all MAN process vent streams that are not being routed to a control device for each month and year from April 2012 to the present. For each process vent identified, provide the total resource effectiveness (TRE) index value.
8. Provide an electronic spreadsheet, where applicable, with the following information for catalytic oxidizer (CatOx) NB-400 for each month and year from April 2012 to the present:
 - a. The average daily catalyst inlet and outlet temperature;
 - b. Demonstration of compliance with the air oxidation rule 35 IAC 218.520 (a), either by VOM destruction efficiency, or VOM exit concentration;
 - c. The average hourly and annual VOM emission rates;
 - d. The date and duration of all CatOx shutdowns that exceed 24 hours, including an annual total (in hours);
 - e. For each period of downtime at the CatOx identified in response to Request 8.d, provide documentation of the operating status of Reactors NR-200A/B, as well as, any other emission source routed to the CatOx;
 - f. The calculated monthly emission rates for VOM, particulate matter (PM), carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen oxides (NO_x), and total hazardous air pollutants (HAP). Provide an explanation of how the numbers are calculated; and
 - g. Copies of potential-to-emit calculations for PM, PM_{2.5}, PM₁₀, VOM, SO₂, NO_x, CO, and total HAP for emissions units routed to NB-400. Provide an explanation of how the numbers are calculated.
9. Provide an electronic spreadsheet, where applicable, with the following information for vent scrubber ND-1500 for each month and year from April 2012 to the present:
 - a. The average daily scrubbant flow rate;
 - b. TRE calculations for process vent streams being vented to ND-1500;
 - c. A description of any operating parameters used by the Facility for compliance purposes and all operating parameters used to ensure proper operation of the unit;
 - d. The operating parameter as recorded at the scrubber;
 - e. The date and duration of all scrubber shutdowns when units vented to the vent header are in operation, as well as an annual total (in hours) for each calendar year;

- f. Provide a narrative of how emissions ducted to the scrubber are handled in the event of a scrubber shutdown and continued operation at associated emission units;
 - g. The calculated monthly emission rates for PM, VOM, CO, SO₂, NO_x, and total HAP. Provide an explanation of how the numbers are calculated; and
 - h. Copies of potential-to-emit calculations for PM, VOM, CO, SO₂, NO_x, and total HAP for emissions units routed to ND-1500. Provide an explanation of how the numbers are calculated
10. Provide an electronic spreadsheet, where applicable, with the following information for residue incinerator NB-800 for each month and year from April 2012 to the present:
- a. Average hourly feed flow rate;
 - b. Daily average combustion chamber temperature;
 - c. Startup periods when the emission limit established at 35 IAC 212.181(d) was exceeded;
 - d. The calculated monthly emission rates for PM, VOM, and HAP. Provide an explanation of how the numbers are calculated.
11. Provide a copy of all quarterly reports required pursuant to 35 IAC 218.426 from April 2012 to the present.
12. Provide total MAN production for each year from April 2012 to the present.

Isophthalic Acid (IPA):

13. Identify all IPA process vent streams that are not being routed to a control device for each month and year from April 2012 to the present. For each process vent identified, provide the TRE index value.
14. Provide an electronic spreadsheet, where applicable, with the following information for catalytic oxidizer (CatOx) HR-1306 for each month and year from April 2012 to the present:
- a. The daily average catalyst inlet and outlet temperature;
 - b. Demonstration of compliance with the air oxidation rule established at 35 IAC 218.520 (a), either by VOM destruction efficiency, or VOM exit concentration;
 - c. The average hourly and annual VOM emission rates;
 - d. The date and duration of all CatOx shutdowns that exceed 24 hours, including an annual total (in hours);

- e. For each period of downtime at the CatOx identified in response to Request 14.d, provide documentation of the operating status of Reactor HR-301, as well as any other emission source routed to the CatOx.
 - f. The calculated monthly emission rates for PM, VOM, CO, SO₂, NO_x, and HAP.
 - g. Copies of potential-to-emit calculations for PM, PM_{2.5}, PM₁₀, VOM, SO₂, NO_x, CO, and total HAP for emission units routed to HR-1306. Provide an explanation of how the numbers are calculated.
15. Provide an electronic spreadsheet, where applicable, with the following information for the air oxidation reactor HR-301 and first crystallizer HD-421 from April 2012 to the present:
- a. For the total organic compounds (TOC) being vented from the reactor, provide the TRE index value;
 - b. Reduction of TOC (minus methane and ethane) emissions as it relates to the requirements set forth at 40 CFR § 60.612.
16. Provide an electronic spreadsheet, where applicable, with the following information for the atmospheric absorber HT-501 for each month and year from April 2012 to the present:
- a. Daily average exit liquid temperature and specific gravity for the bottom section;
 - b. TRE calculations;
 - c. The calculated monthly emission rates for PM, VOM, CO, SO₂, NO_x, and total HAP. Provide an explanation of how the numbers are calculated; and
 - d. Copies of potential-to-emit calculations for PM, VOM, CO, SO₂, NO_x, and total HAP for emissions units routed to HT-501. Provide an explanation of how the numbers are calculated.
17. Provide an electronic spreadsheet, where applicable, with the following information for the low pressure absorber PD-700 for each month and year from April 2012 to the present:
- a. Daily average vent temperature;
 - b. Daily average scrubbant flow rate;
 - c. TRE calculations;
 - d. The calculated monthly emissions for PM, VOM, CO, SO₂, NO_x, and total HAP. Provide an explanation of how the numbers are calculated; and

- e. Copies of potential-to-emit calculations for PM, VOM, CO, SO₂, NO_x, and total HAP for emissions units routed to PD-700. Provide an explanation of how the numbers are calculated.
18. Provide an electronic spreadsheet, where applicable, with the following information for the residue incinerator HB-2301 for each month and year from April 2012 to the present:
- a. Daily average feed rate;
 - b. Daily average combustion chamber temperature;
 - c. Visual emissions observations;
 - d. The calculated monthly emission rates for PM, VOM, CO, SO₂, NO_x, and total HAP. Provide an explanation of how the numbers are calculated; and
 - e. Copies of potential-to-emit calculations for PM, VOMs, CO, SO₂, NO_x, and total HAPs submitted to the IEPA from the initial permit to the present.
19. Provide a copy of all quarterly reports pursuant to IAC 218.426 from April 2012 to the present.
20. Provide total IPA production for each year from April 2012 to the present.

Purified Isophthalic Acid (PIA):

21. Provide an electronic spreadsheet, where applicable, with the following information for scrubbers LM-305, LM-313, and LM-314 for each month and year from April 2012 to the present:
- a. For vent scrubber LM-305, provide the daily average exit liquid temperature and specific gravity;
 - b. For each scrubber, describe the operating parameter used by the Facility for compliance purposes and all operating parameters used to ensure proper operation of the unit;
 - c. The operating parameter as recorded at the scrubber;
 - d. For each operating parameter monitored by the Facility, document the method used to establish the values (reference performance test as applicable), and the effective date of these operating limits;
 - e. The corrective action taken for each deviation from the monitored operating parameter range;
 - f. The date and duration of all scrubber shutdowns when units vented to the vent header are in operation, as well as an annual total (in hours) for each calendar year;

- g. Provide a narrative of how emissions ducted to the scrubber are handled in the event of a scrubber shutdown and continued operation at units;
- h. The TRE index values prior to release of the vent stream to the atmosphere;
- i. The calculated monthly emission rates for PM, VOM, CO, SO₂, NO_x, and total HAP. Provide an explanation for how the numbers are calculated; and
- j. Copies of potential-to-emit calculations for PM, VOM, CO, SO₂, NO_x, and total HAP for emissions units routed to the scrubbers. Provide an explanation for how the numbers are calculated.

Trimellitic Anhydride (TMA):

- 22. For each TMA process vent stream, provide the TRE index value for each month and year from April 2012 to the present.
- 23. Provide an electronic spreadsheet, where applicable, with the following information for thermal oxidizer (TO) MB-1050 for each month and year from April 2012 to the present:
 - a. The daily average minimum catalyst inlet and outlet temperature;
 - b. The average hourly and annual VOM emission rates;
 - c. Total unit operating hours and hours when the TO was not operating;
 - d. For each period of downtime at the TO identified in response to Request 23.c, provide TRE index values for absorbers MT-304 and MT-802;
 - e. The calculated monthly emission rates for PM, VOM, CO, SO₂, NO_x, and total HAP. Provide an explanation of how the numbers are calculated; and
 - f. Copies of potential-to-emit calculations for PM, PM_{2.5}, PM₁₀, VOM, SO₂, NO_x, CO, and total HAP for emissions units routed to MB-1050. Provide an explanation of how the numbers are calculated.
- 24. Provide total TMA production for each month and year from April 2012 to the present.
- 25. Provide the following information for process units CF-1609, CF-1612, CF-1613, MT-304, MT-802, MD-705, MD-766A/B, MB-1025, MF-1101, MB-1012, MB-1002, MM-749, CU-403, and MM-2753 for each month and year from April 2012 to the present:
 - a. The calculated monthly emission rates for PM, VOM, CO, SO₂, NO_x, and total HAP;
 - b. Copies of potential-to-emit calculations for PM, PM_{2.5}, PM₁₀, VOM, SO₂, NO_x, CO, and total HAP. Provide an explanation for how the numbers are calculated.

26. Provide an electronic spreadsheet, where applicable, with the following information for boiler CB-706, for each month and year from April 2012 to the present:
- a. The hourly average gas rate;
 - b. The calculated monthly emission rates for PM, VOM, CO, SO₂, NO_x, and total HAP.
 - c. The hourly average NO_x emission rates;
 - d. Copies of potential-to-emit calculations for PM, PM_{2.5}, PM₁₀, VOM, SO₂, NO_x, CO, and total HAP. Provide an explanation of how the numbers are calculated.
27. Provide an electronic spreadsheet, where applicable, with the following information for the Wastewater Treatment System, for each month and year from April 2012 to present;
- a. Annual organic carbon to anaerobic reactor (ER-701);
 - b. The flare combustion efficiency and how it is determined;
 - c. The calculated hourly and annual emission rates for methane, NO_x, CO, SO₂, and VOM from flare EM-705. Provide an explanation of how the numbers were calculated.
 - d. Provide all inputs to Water9 software or any other model used to calculate emissions from the wastewater system. Provide the source of data for all chemical constituents emitted from the wastewater system.

Appendix C

Confidential Business and Personal Privacy Information

Assertion Requirements

You may assert a business confidentiality claim covering any parts of the information requested in the attached Appendix B, as provided in 40 C.F.R. § 2.203(b).

Emission data provided under Section 114 of the CAA, 42 U.S.C. § 7414, is not entitled to confidential treatment under 40 C.F.R. Part 2.

“Emission data” means, with reference to any source of emissions of any substance into the air:

Information necessary to determine the identity, amount, frequency, concentration or other characteristics (to the extent related to air quality) of any emission which has been emitted by the source (or of any pollutant resulting from any emission by the source), or any combination of the foregoing;

Information necessary to determine the identity, amount, frequency, concentration or other characteristics (to the extent related to air quality) of the emissions which, under an applicable standard or limitation, the source was authorized to emit (including to the extent necessary for such purposes, a description of the manner and rate of operation of the source); and

A general description of the location and/or nature of the source to the extent necessary to identify the source and to distinguish it from other sources (including, to the extent necessary for such purposes, a description of the device, installation, or operation constituting the source).

40 C.F.R. § 2.301(a)(2)(i)(A), (B) and (C).

To make a confidentiality claim, submit the requested information and indicate that you are making a claim of confidentiality. Any document for which you make a claim of confidentiality should be marked by attaching a cover sheet stamped or typed with a caption or other suitable form of notice to indicate the intent to claim confidentiality. The stamped or typed caption or other suitable form of notice should employ language such as “trade secret” or “proprietary” or “company confidential” and indicate a date, if any, when the information should no longer be treated as confidential. Information covered by such a claim will be disclosed by EPA only to the extent permitted and by means of the procedures set forth at Section 114(c) of the CAA and 40 C.F.R. Part 2. Allegedly confidential portions of otherwise non-confidential documents should be clearly identified. EPA will construe the failure to furnish a confidentiality claim with your response to the information request as a waiver of that claim, and the information may be made available to the public without further notice to you.

Determining Whether the Information Is Entitled to Confidential Treatment

All confidentiality claims are subject to EPA verification and must be made in accordance with 40 C.F.R. § 2.208, which provides in part that you must satisfactorily show: that you have taken reasonable measures to protect the confidentiality of the information and that you intend to continue to do so, that the information is not and has not been reasonably obtainable by legitimate means without your consent and that disclosure of the information is likely to cause substantial harm to your business's competitive position.

Pursuant to 40 C.F.R. Part 2, Subpart B, EPA may at any time send you a letter asking that you support your confidential business information (CBI) claim. If you receive such a letter, you must respond within the number of days specified by EPA. Failure to submit your comments within that time would be regarded as a waiver of your confidentiality claim or claims, and EPA may release the information. If you receive such a letter, EPA will ask you to specify which portions of the information you consider confidential by page, paragraph and sentence. Any information not specifically identified as subject to a confidentiality claim may be disclosed to the requestor without further notice to you. For each item or class of information that you identify as being CBI, EPA will ask that you answer the following questions, giving as much detail as possible:

1. For what period of time do you request that the information be maintained as confidential, e.g., until a certain date, until the occurrence of a special event or permanently? If the occurrence of a specific event will eliminate the need for confidentiality, please specify that event.
2. Information submitted to EPA becomes stale over time. Why should the information you claim as confidential be protected for the time period specified in your answer to question number 1?
3. What measures have you taken to protect the information claimed as confidential? Have you disclosed the information to anyone other than a governmental body or someone who is bound by an agreement not to disclose the information further? If so, why should the information still be considered confidential?
4. Is the information contained in any publicly available databases, promotional publications, annual reports or articles? Is there any means by which a member of the public could obtain access to the information? Is the information of a kind that you would customarily not release to the public?
5. Has any governmental body made a determination as to confidentiality of the information? If so, please attach a copy of the determination.
6. For each category of information claimed as confidential, explain with specificity why release of the information is likely to cause substantial harm to your competitive position. Explain the specific nature of those harmful effects, why they should be viewed as

substantial and the causal relationship between disclosure and such harmful effects. How could your competitors make use of this information to your detriment?

7. Do you assert that the information is submitted on a voluntary or a mandatory basis? Please explain the reason for your assertion. If you assert that the information is voluntarily submitted information, explain whether and why disclosure of the information would tend to lessen the availability to EPA of similar information in the future.
8. Is there any other information you deem relevant to EPA's determination regarding your claim of business confidentiality?

If you receive a request for a substantiation letter from the EPA, you bear the burden of substantiating your confidentiality claim. Conclusory allegations will be given little or no weight in the determination. In substantiating your CBI claim(s), you must bracket all text so claimed and mark it "CBI." Information so designated will be disclosed by EPA only to the extent allowed by and by means of the procedures set forth in 40 C.F.R. Part 2, Subpart B. If you fail to claim the information as confidential, it may be made available to the public without further notice to you.

Personal Privacy Information

Please segregate any personnel, medical and similar files from your responses and include that information on a separate sheet(s) marked as "Personal Privacy Information." Disclosure of such information to the general public may constitute an invasion of privacy.

CERTIFICATE OF MAILING

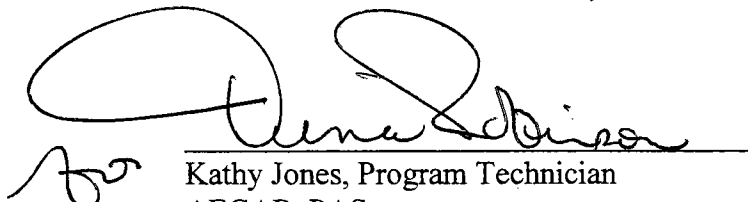
I certify that I sent a Request to Provide Information Pursuant to the Clean Air Act by
Certified Mail, Return Receipt Requested, to:

Dzung Farell
Flint Hills Resources
23425 Amoco Rd
Channahon, IL 60410

I also certify that I sent a copy of the Request to Provide Information Pursuant to the Clean Air
Act by E-mail to:

Yasmine Keppner-Bauman
Acting Manager, Compliance Section, Bureau of Air
Yasmine.Keppner-Bauman@Illinois.gov

On the 23rd day of June 2017.


Kathy Jones, Program Technician
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7647 0261